Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER– 2 • EXAMINATION – WINTER - 2023

Subject Code:4725901 **Date: 05 Jan 2024**

Subject Name:Digital Forensics and Investigations

Time:10:30 AM TO 01:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 (a)	Define the scope and readiness of digital forensics to handle the crime.	**07**
(b)	What do you mean by digital evidence? Mention any five sources for digital evidence in detail.	**07**
Q.2 (a)	Explain the different types of storage system with its file system to storage the digital evidence.	**07**
(b)	Differentiate disk copying and disk imaging by taking any case study.	**07**
	OR	
(b)	Explain the different methods and techniques used for the data acquisition.	**07**
Q.3 (a)	Taking any latest case of ransomware attack, discuss the steps to be used in the network forensics to track the criminal.	**07**
(b)	Mention the different types of website attacks with its investigation process.	**07**
	OR	
Q.3 (a)	Explain the different types of crimes done by using email and the process to handle the email related crimes.	**07**
(b)	Define Anti-Forensics with its techniques.	**07**
Q.4 (a)	Write a short note on Belkasoft digital forensic tool.	**07**
(b)	Discuss the different methods and techniques used for data acquisition in the mobile forensics.	**07**
	OR	
Q.4 (a)	Write a short note on UFED mobile forensics tool.	**07**

(b)	Explain hashing techniques with its use to handle the issue of tampering of the digital evidence.	**07**
Q.5 (a)	Apply the different methods and techniques used for the wireless penetration testing.	**07**
(b)	Evaluate the important highlights of the Digital Personal Data Protection Act, 2023.	**07**

OR

Q.5 (a)	Write a short note on IT act 2000.	**07**
(b)	Discuss the challenges to investigate cloud related crimes.	**07**
